ABSTRACT

In a DC motor drive unit having an open loop control system, a judgment is made as to whether an externally supplied speed instruction data instructs driving of the DC motor or not, based on the speed instruction data itself. If a judgment is made that the speed instruction data instructs driving of the DC motor, a switching means (e.g. switching transistor) connected to the DC motor is controlled by PWM pulses having prescribed duty ratios over a predetermined acceleration period to accelerate the DC motor. After the acceleration period, the switching means is controlled by the PWM pulses having a duty ratio as instructed by the speed instruction data to drive the DC motor. This scheme permits suppression of the startup current of the motor, and hence reduction of the withstand current of the switching transistor, while ensuring secure startup of the motor. In addition, the range of controllable speed of the DC motor can be broadened.